OPTIMAL HEALTH
CHIROPRACTIC & PHYSICAL THERAPY

HIP & KNEE HEALTH

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OVERVIEW

01
About Us

02
Hip Joints & Muscles

03
Hip Injuries

04
Knee Joint & Muscles

05
Knee Inuries

06
Ways We Help Hip & Knee Pain

OPTIMAL HEALTH

- We are a family-owned practice operating out of Egg Harbor Township, NJ
- Physical Therapist (Myself) trained in Pelvic Floor Therapy and 3 chiropractors (Dr. Rick, Dr. Nick, and Dr. Anthony)
- **New Chiropractic Office in Washington Township**
- **Physical Therapy:** We perform movement screenings in order to assess functional mobility and restore stability
- **Chiropractic:** We use a functional chiropractic approach to restore mobility by using soft tissue techniques and/or adjustments in order to off load the body and restore function

ABOUT ME

- **Graduated with my DPT from Stockton University**
- Worked at Bacharach for 3 years
- **Started the Physical Therapy Department at Optimal Health in 2018**
- **Continuing education:**
  - Certified in McKenzie Mechanical Diagnosis and Treatment (MDT)
  - Certified in Selective Functional Movement Assessment (SFMA)
  - Active Release Technique (ART)
  - Certified in Dynamic Neuromuscular Stabilization Exercise (DNS)
  - Certified in Dry Needling
- **What I treat:**
  - Musculoskeletal injuries
  - Acute to Chronic pain
  - Pelvic floor dysfunctions
  - Balance and Gait disorders
  - Post Surgical Joint Repairs

HIP JOINT

One of the most mobile joints in the body

Hip provides:
•Support
•Shock absorption
•Balances the body

Requires mobility and stability

Moves in flexion, extension, abduction, adduction, internal and external rotation

High Level of mobility creates an increased chance for injury

Low back, core and knee assist with stability for the hip

Hip Bones consist of Pelvis and Femur

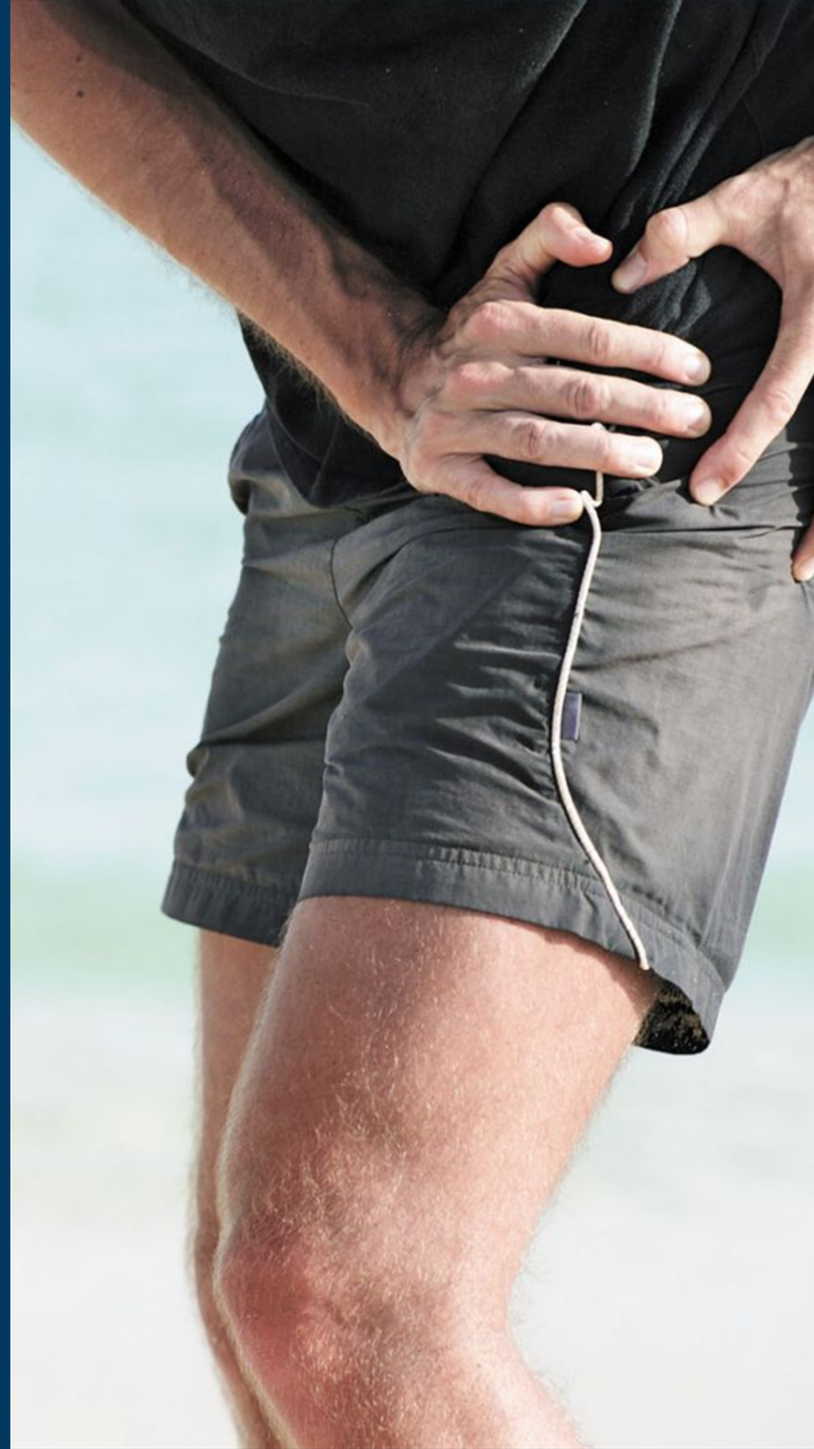
Ball and socket joint held together with a capsule, ligaments, and muscles

Muscles of the Hip

Flexiors	Extensors	Abductors (stabilizers)	Adductors	Lateral Rotation	Medial Rotation
• Psoas Major and Minor • Iliacus • Iliopsoas	• Glut Max	• Glute med and Min	• Pectineus • Adductor (longus, brevis, magnus)	• Piriformis • Sub and Inf Gamellus • Quadratus Femoris	• Glut Med

Types of Hip Injuries

- Hip Tendonitis
- Hip Strain
- Hip Bursitis
- Labral Tear
- Femoral Acetabular Impingement
- Piriformis Injury
- Hip Dislocation
- Hip Fracture
- Hip Arthritis - Typically results in Hip Replacement



HIP PAIN

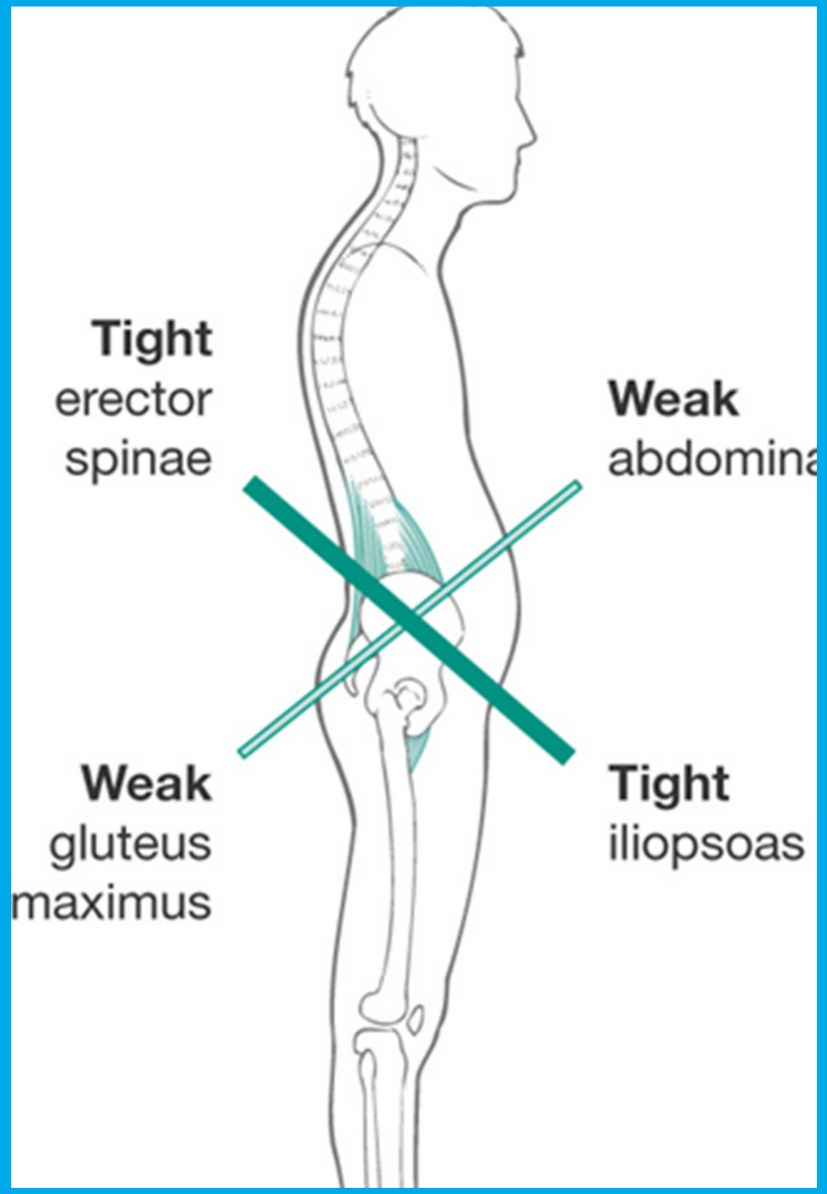
Injuries can lead to:

- Inflammation
- Weakness
- Soreness
- Swelling
- Bleeding
- Scarring

Scar tissue can bind with healthy tissue to form adhesions of the muscles

Increased tightness and adhesions can result in muscle tearing

REASONS FOR HIP PAIN



- Anterior (forward) Pelvic tilt
- Inc. Lumbar Lordosis
  - Decreased hip extension will increase motion through the lumbar spine
  - Lumbar hyperextension will lead to facet jamming and generalized low back pain
- Tight Hip Flexors
- Weak Gluteal Muscles
- Weak Core Muscles
- Tight Hamstrings

KNEE JOINT

Hinge Joint

Four Movements

- Flexion
- Extension
- Lateral Rotation
- Medial Rotation

Bones:

- Tibia
- Fibula
- Femur
- Patella

Ligaments

- Patellar ligament
- Tibial (medial) collateral ligament
- Fibular (lateral) collateral ligament
- Anterior cruciate ligament
- Posterior cruciate ligament

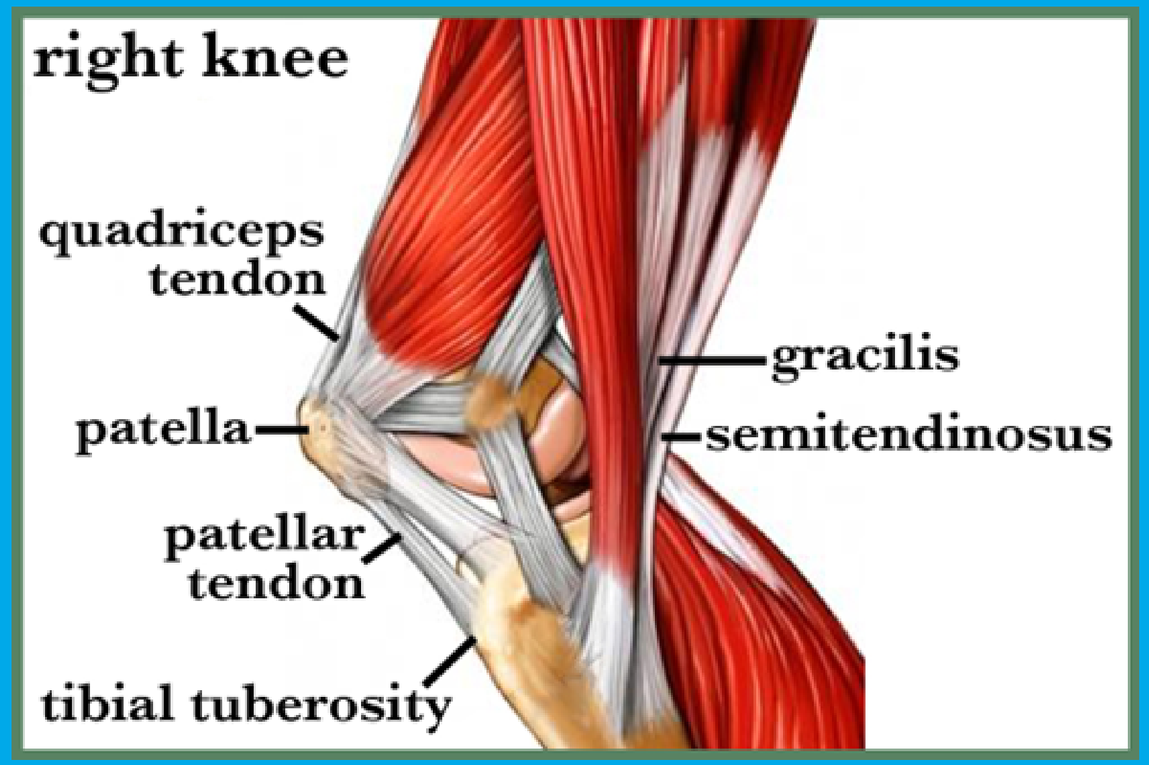
Meniscus

- Medial Meniscus
- Lateral Meniscus

Bursae

- Suprapatellar Bursa
- Prepatellar Bursa
- Infrapatellar Bursa
- Semimembranosus Bursa

MUSCLES OF THE KNEE



Flexors

Hamstring
Gracilis
Sartorius
Popliteus

Extensors

Quadriceps Femoris

Lateral Rotators

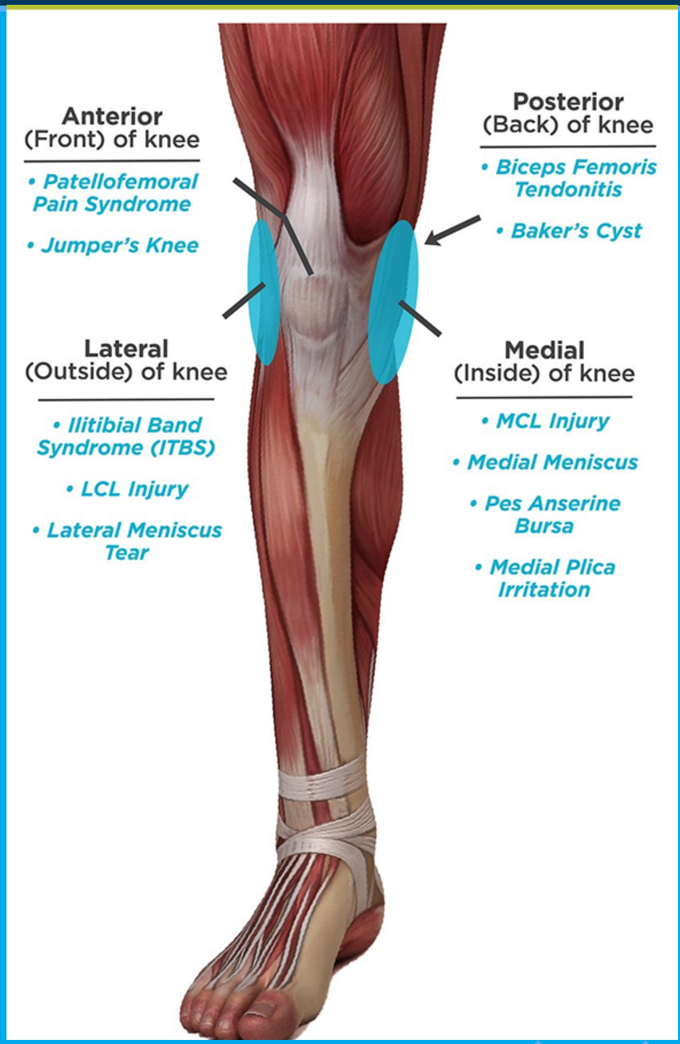
Biceps Femoris

Medial Rotators

Semimembranosus
Semitendinosus
Gracilis
Sartorius
Popliteus

TYPES OF KNEE INJURIES

- Ligament Tear, ie: ACL/MCL
- Meniscal Tear
- Patella Femoral Syndrome
- Pes Anserine Bursa
- Medial Plica Irritation
- Runner’s Knee
- Biceps Femoris Tendonitis
- Baker’s Cyst
- Iliotibial Band Syndrome (IT Band)
- Knee Arthritis - Typically results in Knee Replacement



KNEE PAIN

- Injuries can be internal ligaments and structures
  - ie: ACL tear, meniscus tear
- Knee pain can be combination of several muscles, tendons and ligaments that are damaged from chronic repetitive stress
  - ie: runner’s knee, IT Band Syndrome and arthritis
- Poor muscle strength, endurance and stability lead to tissue damage
  - Cannot maintain lower extremity alignment in weight bearing
    - Usually dysfunction in the hip and foot/ankle lead to knee pain

HOW WE CAN HELP HIP & KNEE PAIN

- **Treatments**
  - **Physical Therapy**
    - Assess the pain, the hip and knee biomechanics and gait, and take a history of the injury
    - Reduce or eliminate the symptoms
      - Soft Tissue Techniques: Active Release Technique, Graston, Post Isometric Relaxation, and Dry Needling
    - Create a corrective exercise program designed for the individual client
  - **Chiropractic**
    - Soft Tissue Techniques
    - Adjustments to Joint Restrictions
    - Orthotics

CORRECTIVE STRATEGIES FOR HIP AND KNEE

01

<u>Stretch Hip Muscles</u>
Warrior stretch
Quad Stretch
Psoas Stretch
Piriformis Stretch

02

<u>Strengthen & Engage Glutes</u>
Glute Bridges
Clamshells
Lateral Banded Walks
Sit to Stands

03

<u>Core Engagement</u>
Planks
Birddogs
Deadbugs
Side Planks

04

<u>Restore Lumbar Curve</u>
Cobra Press ups
Pelvic Tilts
Double Knees to Chest

05

<u>MOVE OFTEN</u>

THANK YOU!

Questions?

Connect with us.

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